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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,287	01/27/2004	William M. Andre	#012 [2756.3012.001]	9184

7590 04/11/2007  
William M. Francis  
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EXAMINER
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ROSS, DANA

ART UNIT	PAPER NUMBER
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3722

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/765,287

Applicant(s)

ANDRE ET AL.

Examiner

Dana Ross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-17 and 19-25 is/are rejected.
- 7) ☒ Claim(s) 8 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/27/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. After further review, it is the position of the Patent Office that the objected claims 3-6 and 13-16 which were previously objected to as being dependent upon a rejected base claim, do not contain allowable subject matter, and therefor the indication of allowable subject matter is withdrawn in view of the below rejection.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 5, 7, 9, 11, 12, 15, 17, 19, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,429,376 to Mueller et al.

Mueller et al. discloses an apparatus (C) to releasably retain a workpiece (W) comprising: a body (12); at least one diaphragm (45) carried by the body and defining at least in part a fluid chamber (44b) constructed to contain a fluid. The at least one diaphragm having an annular flange portion axially abutting and attached to at least a portion of the body (see figs.1, 5). At least one collet (22) having at least one displacement relief (see fig. 2), a diaphragm engaging surface and a workpiece engaging surface (see fig. 5), and being carried by the body (see figs.1, 5). When the fluid in the fluid chamber is pressurized a drive force is transmitted through the at least one diaphragm and the at least one collet to urge the at least one collet into engagement with the workpiece to releasably retain the workpiece (see Abstract). At least one interengagement feature (48) interengaging the at least one diaphragm, and the at least one collet

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to resist the at least one collet from twisting relative to the at least one diaphragm (see figs.1, 5). A ring member (21) disposed axially rearward of the at least one collet (see fig.1); and at least one drive pin (26) extending axially through the at least one collet and into a portion of the ring member to resist the at least one collet from twisting relative to the at least one diaphragm (see figs.1, 5).

Regarding claims 5 and 15, Mueller teaches the limitation of at least one drive member and at least one driven member threaded together since the screw 26 (see figure 1) threads the drive member and driven member together.

4. Claims 1, 2, 9-12, and 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,015,154 to Andre et al.

Andre et al. discloses an apparatus (10) to releasably retain a workpiece (12) comprising: a body (30); at least one diaphragm (26) carried by the body and defining at least in part a fluid chamber (18) constructed to contain a fluid. The at least one diaphragm having an annular flange portion axially abutting and attached to at least a portion of the body (see fig.1). At least one collet (14) having at least one displacement relief (24), a diaphragm engaging surface, a workpiece engaging surface, and being carried by the body (see fig.1). When the fluid in the fluid chamber is pressurized a drive force is transmitted through the at least one diaphragm and the at least one collet to urge the at least one collet into engagement with the workpiece to releasably retain the workpiece (see columns 1 and 2, lines 53-67 and 1-2, respectively). At least one interengagement feature (50) interengaging the at least one diaphragm, and the at least one collet to resist the at least one collet from twisting relative to the at least one diaphragm (see fig.1). The apparatus is an arbor such that the workpiece substantially circumscribes the at least

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one collet and fluid pressure acts through the at least one diaphragm to expand the at least one collet radially outwardly into engagement with the workpiece (see fig.1, and columns 1 and 2, lines 53-67 and 1-2, respectively).

5. Claims 1, 2, 9, 10, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,441,284 to Mueller et al.

Mueller et al. discloses an apparatus (10) to releaseably retain a workpiece (12) comprising: a body (22); at least one drive member (82) carried by the body and defining at least in part a fluid chamber (116) constructed to contain a fluid. The at least one drive member having an annular flange portion axially abutting and attached to at least a portion of the body (see figs.1, 5). At least one driven member (34) is carried by the body (see fig.1), and having at least one displacement relief (38). When the fluid in the fluid chamber is pressurized a drive force is transmitted through the at least one drive member and the at least one driven member to urge the at least one driven member into engagement with the workpiece to releasably retain the workpiece (see fig. 5, and column 1, lines 42-57). At least one interengagement feature (132) interengaging the at least one drive member, and the at least one driven member to resist the at least one driven member from twisting relative to the at least one drive member (see fig.1). The apparatus is an arbor such that the workpiece substantially circumscribes the at least one driven member and fluid pressure acts through the at least one drive member to expand the at least one driven member radially outwardly into engagement with the workpiece (see fig.1, and column 1, lines 42-57).

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6. Claims 21, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 4,699,389 (Buck).

Buck teaches a collet 31 with interengagement elements (threaded and splined, see figures 2 and 3, for example) engaging sleeve (diaphragm) 15.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller '376 in view of Buck, Muller '284 in view of Buck, and over Andre in view of Buck.

Both Mueller '376 and '284, and Andre teach all aspects of claims 1 and 11.

Examiner notes that splined connects are clearly an alternative way to connect two elements together as is taught by Buck. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a splined connection for the purpose of connecting elements together and prevent relative movement.

9. Claims 3-4 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller '376.

Mueller '376 teaches at least one drive pin extends radially through a portion of the at least one driven member and a portion of the at least one drive member. It would have been obvious to one of ordinary skill in the art to have replaced the axially extending drive pin shown above of Mueller '376 with one having a radially extended pin, in order to provide a more

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accessible pin and since the rearrangement of parts requires only routine skill in the art.

Furthmore, Mueller '376 teaches it is known to use radially aligned pins (18) (see figure 5).

***Allowable Subject Matter***

10. Claim 8 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

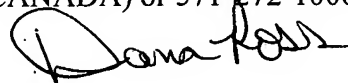
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*Conclusion*

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dana Ross  
Examiner  
Art Unit 3722

  
dmr